

## Description of a New Species of the Genus *Galerucella* (Coleoptera, Chrysomelidae, Galerucinae) from Hokkaido, Northern Japan

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**Abstract** A new galerucine species, *Galerucella chujoi* is described from Hokkaido, northern Japan. This is a fifth member of the genus *Galerucella* CROTCH from Japan. A key to the Japanese species of the genus is given.

Four species of the genus *Galerucella* CROTCH have been recorded from Japan. The first members of the genus were described by BALY in 1874, as two new species under the names of *G. vittaticollis* and *G. distincta*, both of which were later regarded as junior synonyms of *G. grisea* JOANNIS, 1866. At the same time, BALY recorded one more species *G. sagittariae* (GYLLENHAL, 1813), which was later described by LABOISSIÈRE in 1922 as a new species, *G. nipponensis*. The remaining two species, *G. ozeana* and *G. ohkurai* were described by NAKANE in 1963 and by KIMOTO and TAKAHASHI in 1992, respectively. In this paper, a fifth member of the genus is described as a new species, and a key to the Japanese species of the genus is provided.

*Galerucella chujoi* Y. KOMIYA, sp. nov.

(Figs. 1 & 2)

**Male.** Body elongate, parallel-sided. Head reddish brown, with labrum and vertex blackish brown, pronotum reddish brown with anterior margin, central portion and lateral depressions dark brown, scutellum dark blackish brown, elytron largely dark brown but gradually changing to reddish brown toward the apex, with lateral and sutural margins and longitudinal band along vague costa in the central portion narrowly yellowish or reddish brown, ventral surface blackish brown with last visible abdominal sternite reddish brown; antenna dark blackish, legs reddish brown with distal end of femora, external margin, proximal and distal ends of tibiae, and tarsi more or less darkened.

Head with vertex distinctly punctate, covered with short hairs, with longer ones along orbital margin, and with a shallow longitudinal furrow starting from anterior margin, continuing forward to interantennal sulcus; frontal tubercle transversely raised, distinctly separated anteriorly and posteriorly by furrows; surface smooth and shining, its anterior corner extending forward between antennae; clypeus triangular, rugosely

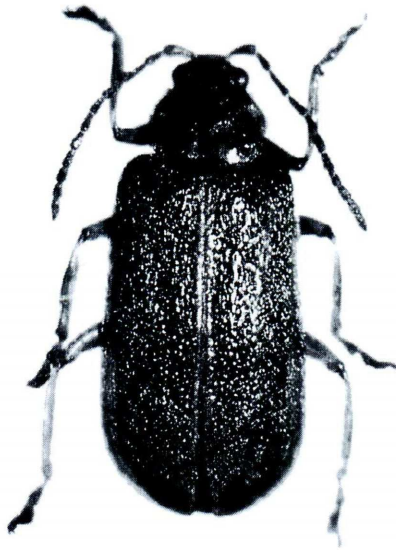


Fig. 1. *Galerucella chujoi* Y. KOMIYA, sp. nov., holotype, male.

punctured with short hairs; labrum semicircularly furnished anteriorly with two transverse rows of long hairs. Antenna robust, a little shorter than a half of the body length, thickly covered with short hairs and a few long ones distally; first segment long and robust, club-shaped; second a little longer than a half of the first; third elongate, about 1.5 times as long as the second; fourth distinctly shorter than the third; the following six segments subequal to each other; terminal segment almost equal in length to the second, its apex pointed. Pronotum transverse, about 1.6 times as wide as long, narrowly but distinctly margined all round the borders; anterior margin nearly straight but distinctly emarginate at middle, lateral margins bisinuate, widest a little before the middle and clearly emarginate slightly behind the middle, basal margin obliquely truncated near posterior angle, then almost straight but distinctly emarginate at middle; anterior and posterior corners thickened with a seta-bearing pore; surface smooth and shining, with a shallow but distinct longitudinal furrow in the median portion and with a pair of deep lateral depressions at the sides, which are covered thickly with large punctures and short hairs, latero-subbasal area narrowly but thickly impressed by large punctures with short hairs. Scutellum trapezoidal, widest at base; surface thickly impressed by relatively fine longitudinal corrugations. Elytron almost parallel-sided, slightly widened toward apex, its lateral margin narrowly explanate except extremely near the apical angle; surface convex with a vague oblique longitudinal short costa from a little medial portion of humerus to a halfway to near the middle, thickly punc-

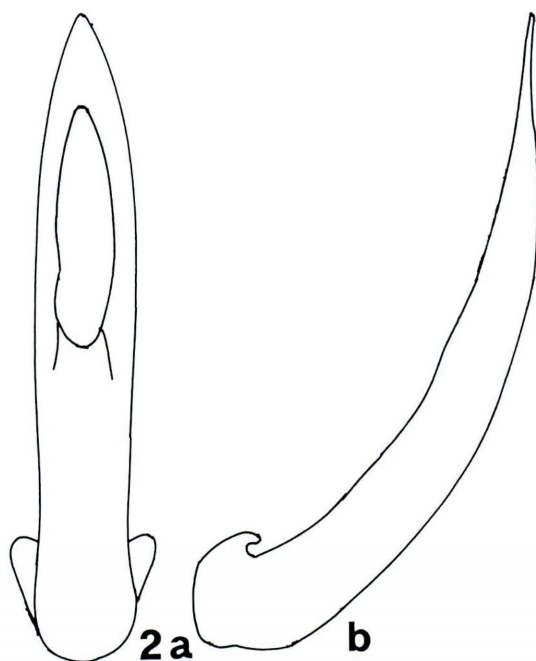


Fig. 2. Male genitalia of *Galerucella chujoi* Y. KOMIYA, sp. nov.

tured throughout, and closely pubescent, sutural angle of elytron slightly elongated in form of a small tooth; elytral epileuron not narrowed until preapical portion, surface feebly concave with heavy punctures and fine hairs. Venter impressed by fine transverse corrugations and covered thickly with short hairs; last visible abdominal sternite emarginate triangularly at apical margin in the middle. Male genitalia as illustrated in Fig. 2, basically the same as those of the other members of the genus.

Female. Unknown.

Body length:  $5.2 \pm 0.3$  (n=6) mm. Body breadth:  $2.5 \pm 0.2$  (n=6) mm.

Holotype: male, Shimo-sarobetsu Gen-ya (ca. 2.5 m alt.), Horonobe-chô, Teshio-gun, Hokkaido, Japan, 14–VII–2002, Y. KOMIYA lgt.

Paratypes: 6♂♂, the same data as the holotype; 1♂, Kabutonuma (ca. 7.5 m alt.), Toyotomi-chô, Teshio-gun, Hokkaido, Japan, 2–VIII–2004, Y. KOMIYA lgt.

The type series is tentatively housed in the author's collection, but will be deposited in the most appropriate institution together with the whole collection of the author in near future.

The present new species is closely allied to *Galerucella nymphaea* (LINNAEUS, 1758) from Europe to Northeast Asia, but is easily distinguished from the latter by the structure of pronotum.

The specific name is dedicated to the late Dr. Michio CHÛJÔ, Professor Emeritus,



Kagawa University, for his outstanding contributions to the chrysomelid fauna of Japan, Taiwan and the adjacent areas.

### Key to the Species of Japanese *Galerucella*

A key to the Japanese species of the genus *Galerucella* was provided by KIMOTO and TAKAHASHI (1992). It is modified by addition of the present new species.

1. Sutural angle of elytron slightly elongated in form of a small tooth. . . . . 2.
- Sutural angle of elytron obtuse, rounded. . . . . 3.
2. Lateral margin of pronotum strongly emarginate behind middle; head reddish brown, with labrum and vertex blackish brown, pronotum reddish brown with anterior margin, central portion and lateral depressions dark brown; scutellum dark blackish brown; elytron largely dark brown but gradually changing to reddish brown toward the apex, with lateral, sutural margins and longitudinal band along vague costa in the central portion narrowly yellowish or reddish brown, ventral surface blackish brown with last visible abdominal sternite reddish brown; antenna dark blackish, legs reddish brown with distal ends of femora, external margin, proximal and distal ends of tibiae, and tarsi more or less darkened; length 4.8–5.6 mm (Japan: Hokkaido) . . . . . *G. chujoi* sp. nov.
- Lateral margin of pronotum almost straight, feebly emarginate behind middle; vertex, antenna, pronotum, meso- and metathoraces and elytron largely blackish brown, anterior half of head, anterior margin and ventral surface of thorax, lateral margin of elytron and abdomen reddish brown; antenna at least partly and legs wholly reddish brown, with tarsi and outer surfaces of tibiae black; length 4.8–6.0 mm (Siberia, Korea, Japan: Hokkaido, Honshu, Shikoku, Kyushu) . . . . . *G. nipponensis* LABOISSIÈRE, 1922.
3. Elytron with lateral margin broadly explanate and widely rounded laterad and widest at middle . . . . . 4.
- Elytron with lateral margins not broadly explanate and subparallel-sided; reddish brown; each elytron with an ill-defined submarginal pitchy stripe, which starts from humerus and running toward apex; antenna black with basal segments paler; vertex and meso- and metathoraces, in some cases also some parts of abdomen, blackish; length 3.7–5.2 mm (Europe, Siberia, Sakhalin, Kurile Islands, Korea, Japan: Hokkaido, Honshu, Shikoku, Kyushu; Ryukyu Islands: Okinawa, Ishigaki, Iriomote; China, Taiwan) . . . . . *G. griseescens* (JOANNIS, 1866).
4. Pronotum sparsely impressed by some indistinct punctures latero-subbasally and its basal margin distinctly emarginate at middle; generally dark reddish brown, with vertex, antenna and ventral surface of thorax blackish; length 4.1–5.3 mm (Japan: Honshu) . . . . . *G. ozeana* NAKANE, 1963.
- Pronotum rather closely impressed by distinct and large punctures latero-subbasally and its basal margin almost straight or feebly emarginate at middle; disc

of elytron and legs generally blackish; head generally blackish, with clypeus brownish; antenna, ventral surface and abdomen generally blackish; length 5.3–6.0 mm (Japan: Honshu) . . . . . *G. ohkurai* KIMOTO et TAKAHASHI, 1992.

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### 要 約

小宮義璋：北海道産イチゴハムシ属1新種の記載。—— 日本産イチゴハムシ属の第5番目の種として、*Galerucella chujoi* チュウジョウヒゲナガハムシ（新称）を記載する。この種は北海道北部に産し、ヨーロッパから北東アジアにかけて分布する *G. nymphaea* (LINNAEUS, 1758) にもっともよく似ているが、前胸背板の構造により容易に区別することができる。またこの新種を加えた日本産イチゴハムシ属の検索表を作成した。

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